SERVLETS - AUTO PAGE REFRESH

Consider a webpage which is displaying live game score or stock market status or currency exchange ration. For all such type of pages, you would need to refresh your web page regularly using referesh or reload button with your browser.

Java Servlet makes this job easy by providing you a mechanism where you can make a webpage in such a way that it would refresh automatically after a given interval.

The simplest way of refreshing a web page is using method **setIntHeader()** of response object. Following is the signature of this method:

```
public void setIntHeader(String header, int headerValue)
```

This method sends back header "Refresh" to the browser along with an integer value which indicates time interval in seconds.

Auto Page Refresh Example:

This example shows how a servlet performs auto page refresh using **setIntHeader()** method to set **Refresh** header.

```java
// Import required java libraries
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.util.*;

// Extend HttpServlet class
public class Refresh extends HttpServlet {

  // Method to handle GET method request.
  public void doGet(HttpServletRequest request,
                    HttpServletResponse response)
          throws ServletException, IOException
  {
      // Set refresh, autoload time as 5 seconds
      response.setIntHeader("Refresh", 5);

      // Set response content type
      response.setContentType("text/html");

      // Get current time
      Calendar calendar = new GregorianCalendar();
      String am_pm;
      int hour = calendar.get(Calendar.HOUR);
      int minute = calendar.get(Calendar.MINUTE);
      int second = calendar.get(Calendar.SECOND);
      if(calendar.get(Calendar.AM_PM) == 0)
        am_pm = "AM";
      else
        am_pm = "PM";

      String CT = hour+":"+ minute +":"+ second +" "+ am_pm;

      PrintWriter out = response.getWriter();
      String title = "Auto Page Refresh using Servlet";
      String docType =
      "<!doctype html public \"-//w3c//dtd html 4.0 " +
      "transitional//en\">\n";
      out.println(docType +
        "<html>\n" +
        "<head><title>" + title + "</title></head>\n"+
        "<body bgcolor=\"#f0f0f0\">\n" +
```

```
         "<h1 align=\"center\">" + title + "</h1>\n" +
         "<p>Current Time is: " + CT + "</p>\n");
   }
   // Method to handle POST method request.
   public void doPost(HttpServletRequest request,
                       HttpServletResponse response)
      throws ServletException, IOException {
      doGet(request, response);
   }
}
```

Now let us compile above servlet and create following entries in web.xml

```
....
 <servlet>
     <servlet-name>Refresh</servlet-name>
     <servlet-class>Refresh</servlet-class>
 </servlet>

 <servlet-mapping>
     <servlet-name>Refresh</servlet-name>
     <url-pattern>/Refresh</url-pattern>
 </servlet-mapping>
....
```

Now call this servlet using URL http://localhost:8080/Refresh which would display current system time after every 5 seconds as follows. Just run the servlet and wait to see the result:

AUTO PAGE REFRESH USING SERVLET

Current Time is: 9:44:50 PM